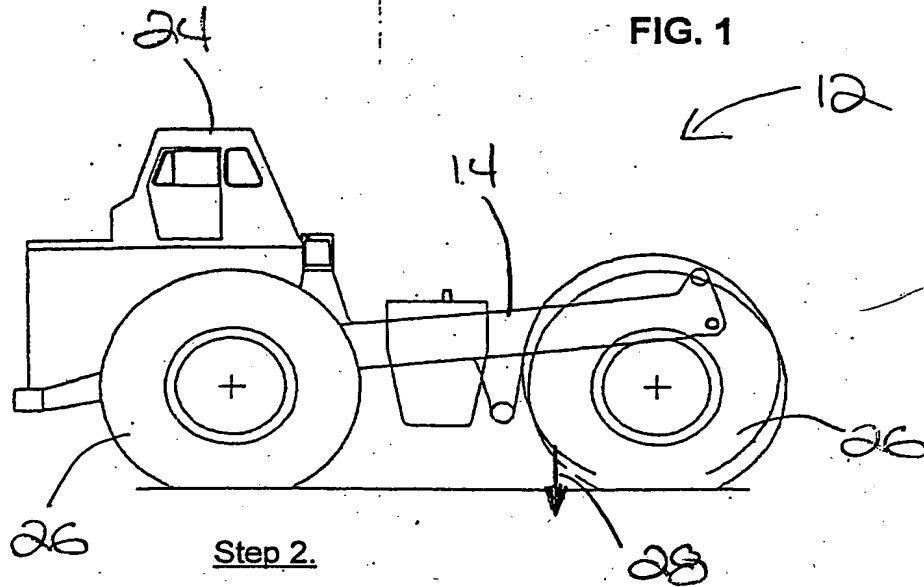


12



Step 2.

Using truck chassis empty and loaded weights establish "Load" center of gravity.

FIG. 2

Step 3.

Step 3.

**Establish proposed body floor line.**

FIG. 3

Horizontal Plane

Step 4.

**Step 4.**

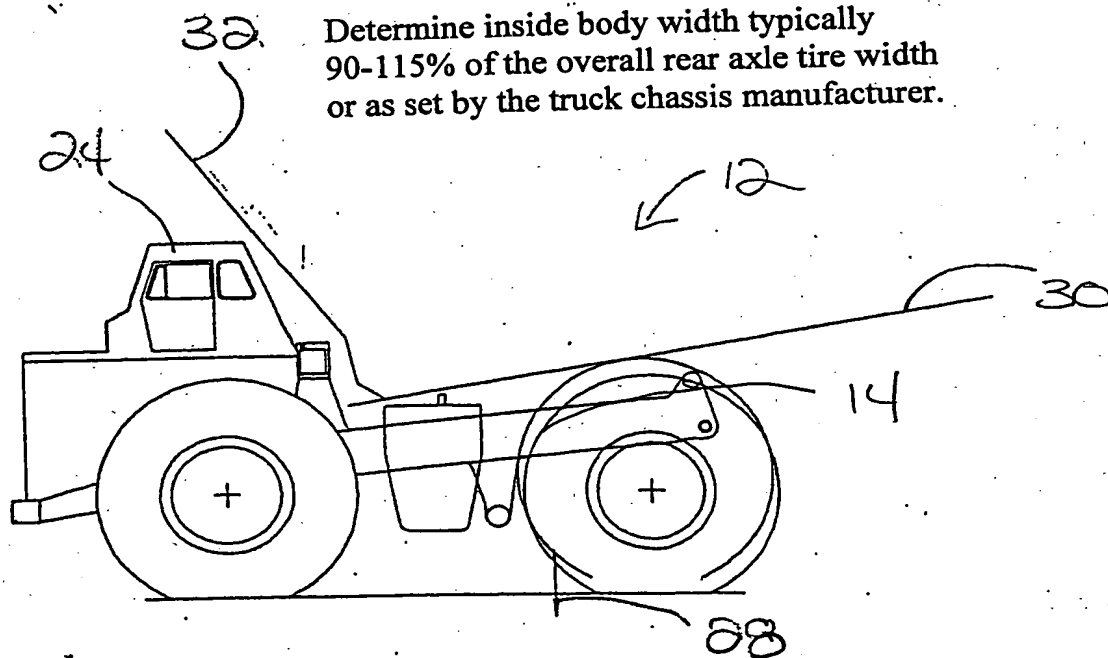
Establish proposed body front slope line.

002F50-27960560

FIG. 4

Step 5.

Determine inside body width typically  
90-115% of the overall rear axle tire width  
or as set by the truck chassis manufacturer.



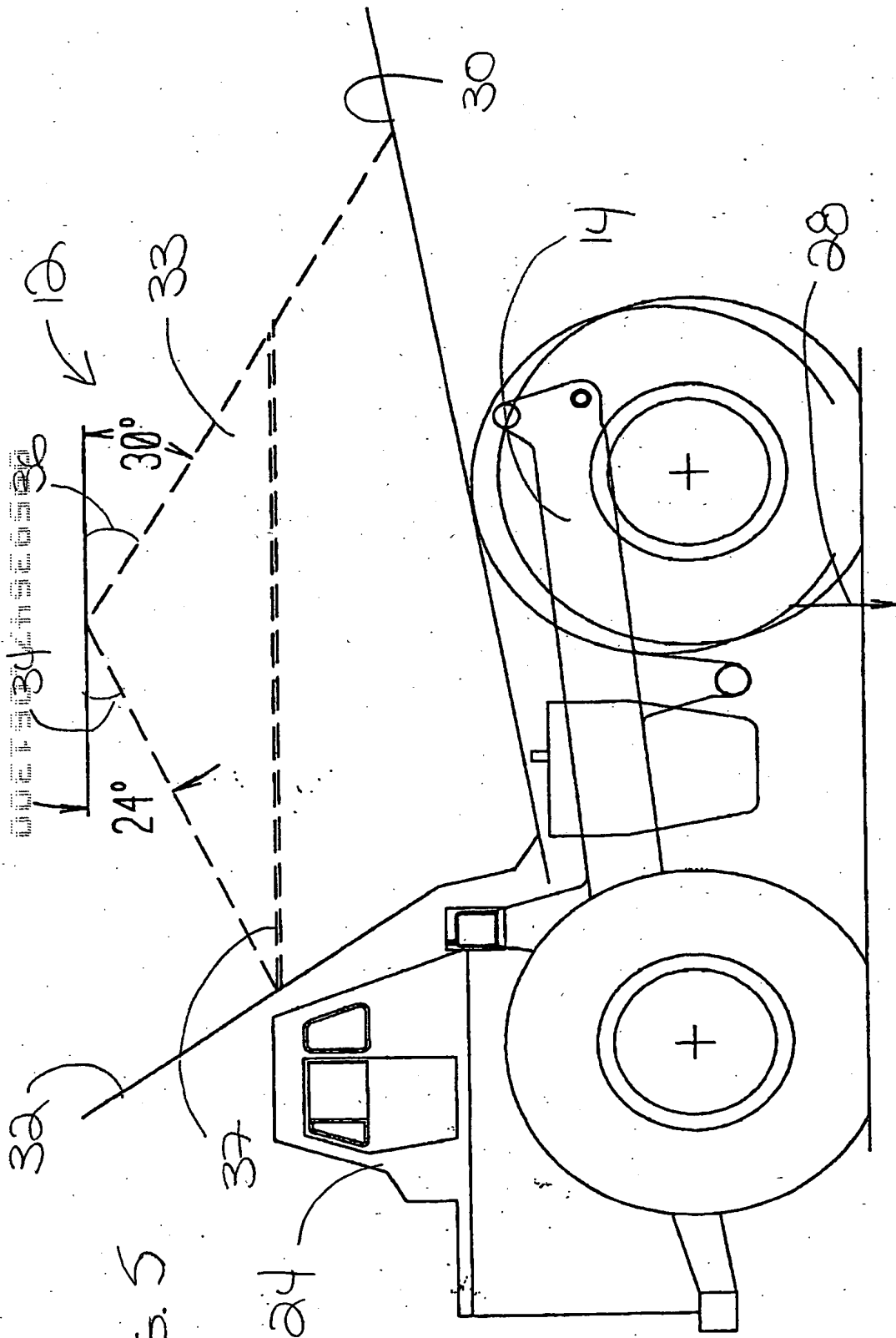
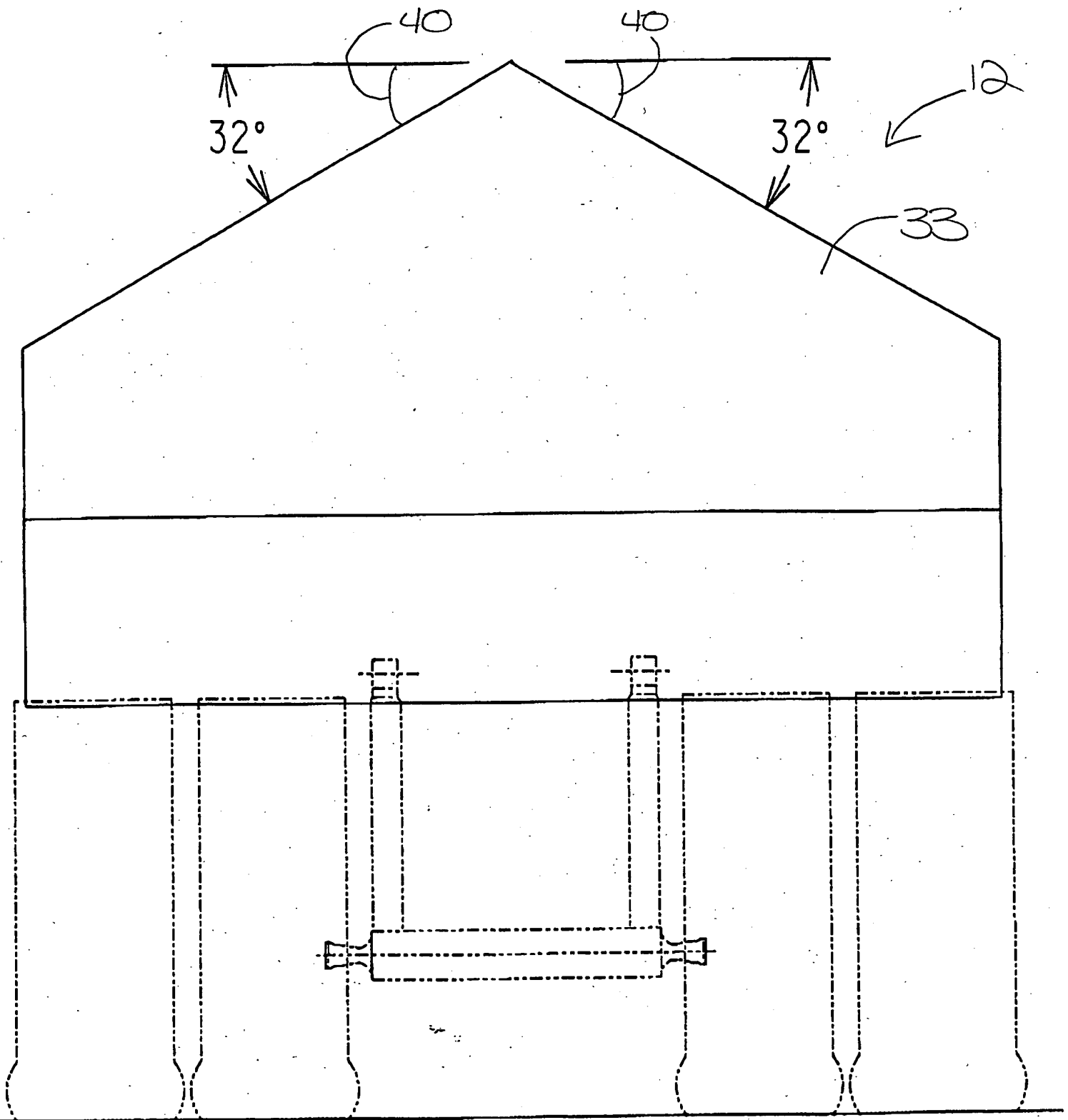


FIG. 5

Step 6.

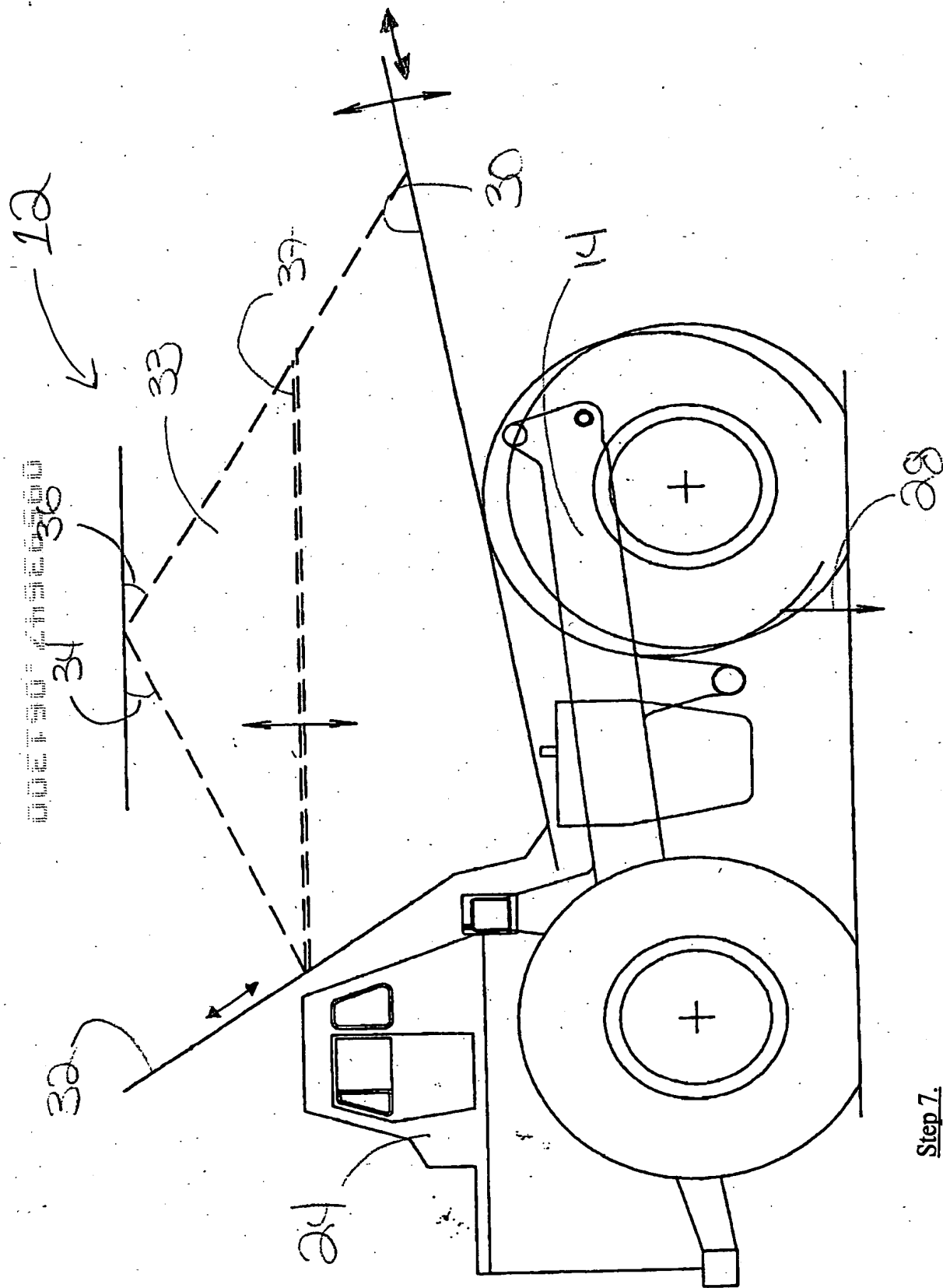
Using customer specific information, develop an approximate heap profile. Determine the center of gravity of the approximate heap profile and compare it to the correct center of gravity of Step 2.

006750-2136560



Step 6.

FIG. 6



# Step 7.

Adjust body floor line, body front slope line and body sidewalls as needed to obtain the correct center of gravity of Step 2.

FIG. 7

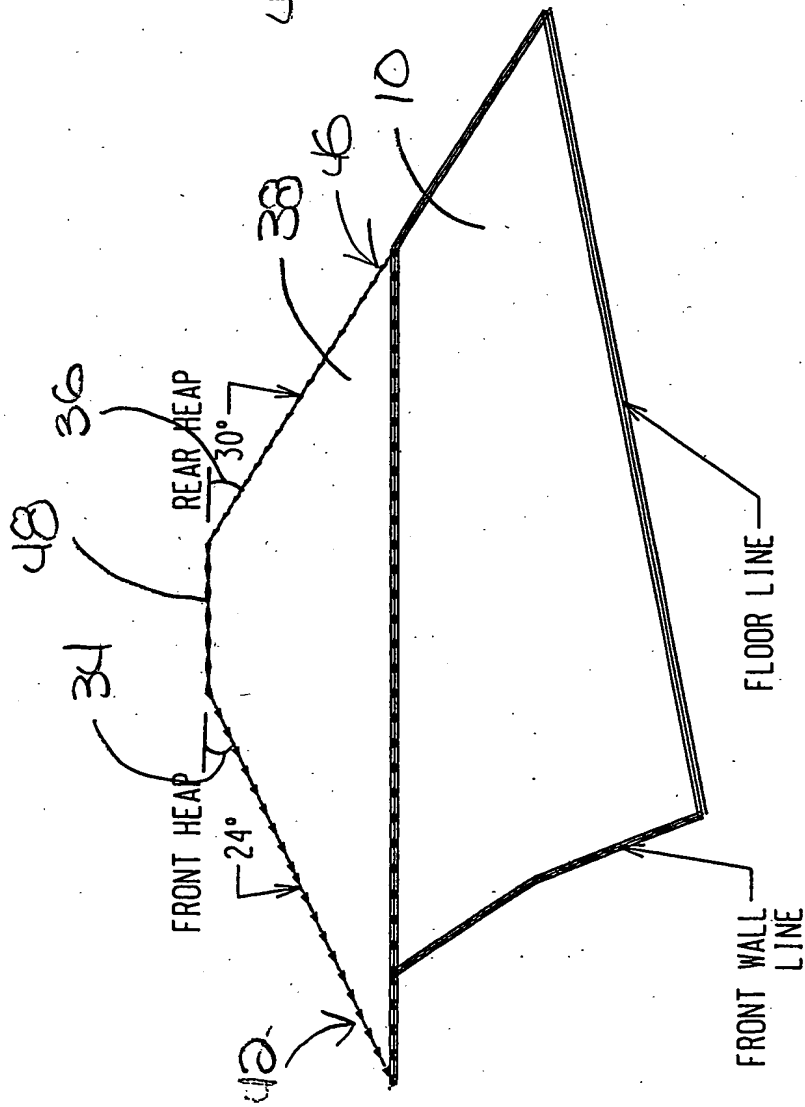


FIG. 34

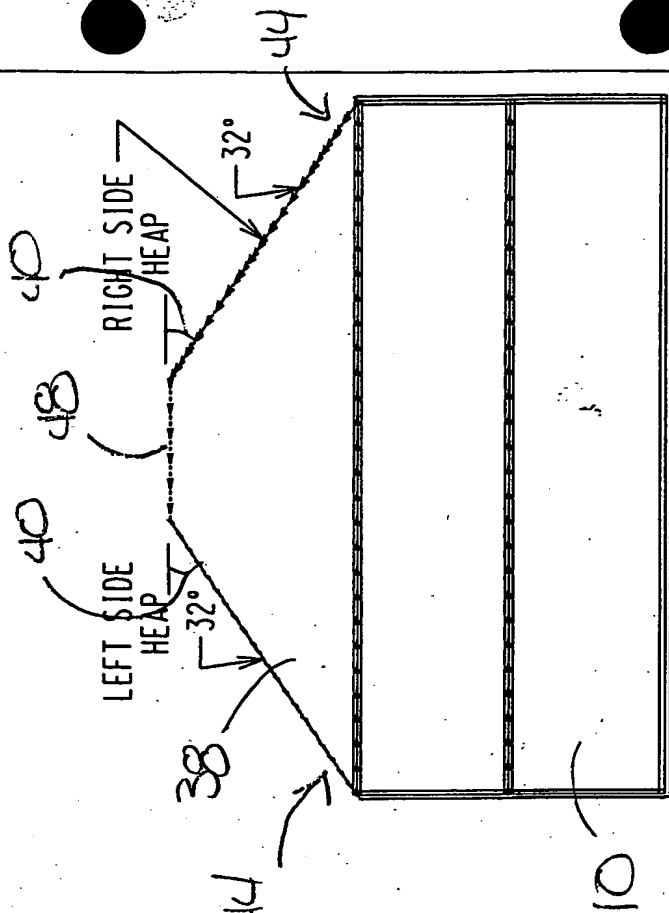


FIG. 35

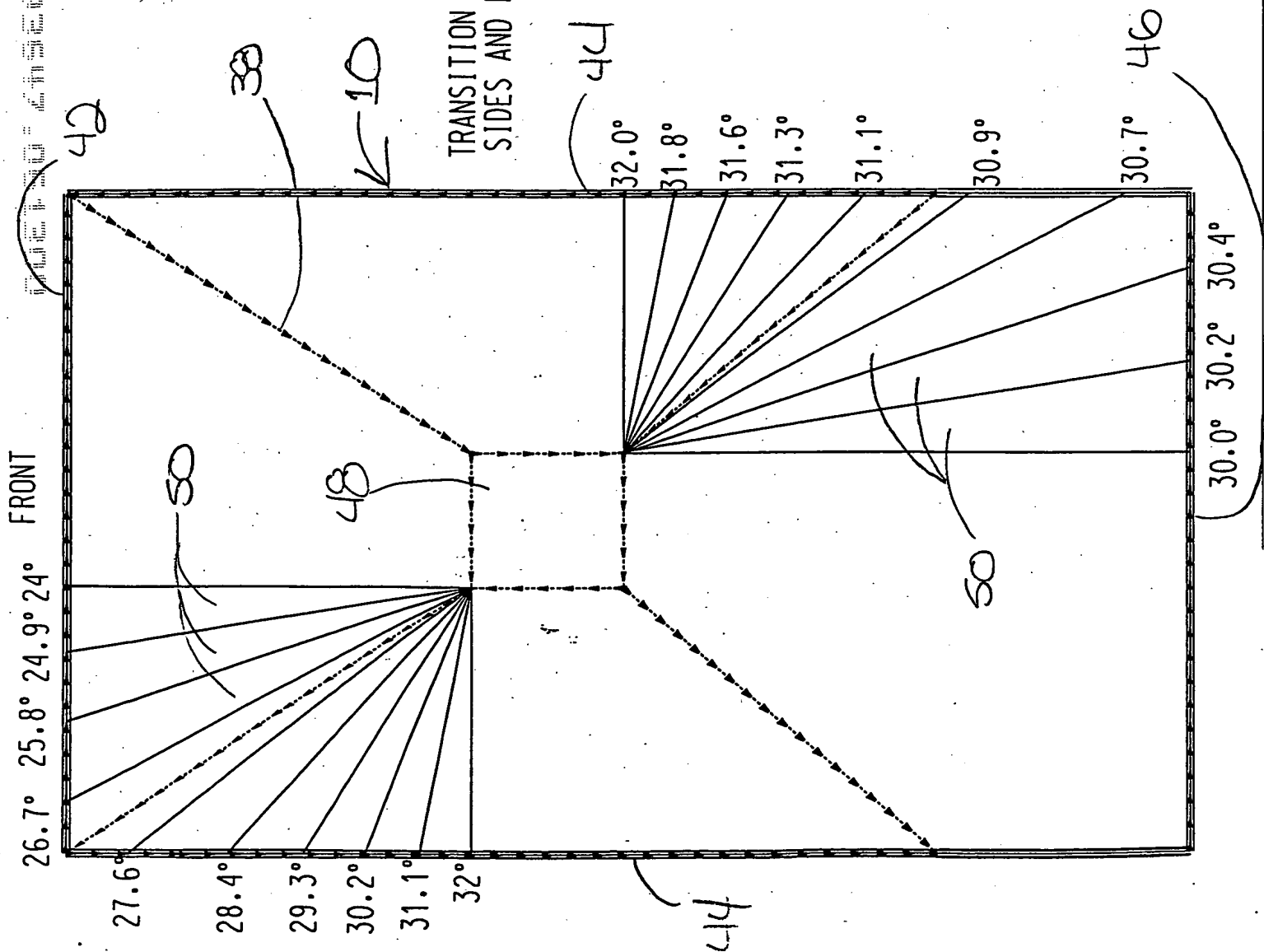
Step 8.

Based on the specific customer information and the resulting load profile, a three dimensional model is developed which incorporates the actual side, front and rear angles of material repose and corner voids.

FIG. 9

Step 8, cont.

TRANSITION BETWEEN SIDES AND FRONT AND  
SIDES AND REAR ARE BROKEN INTO EQUAL  
10° SEGMENTS.





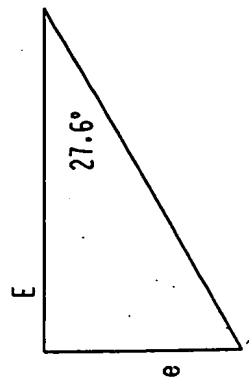
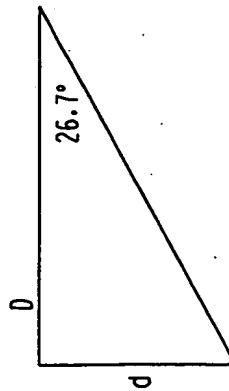
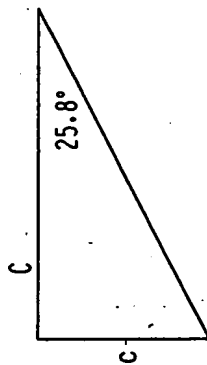
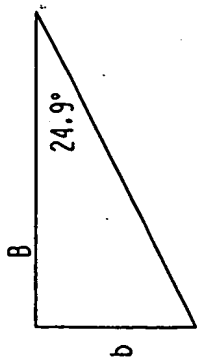
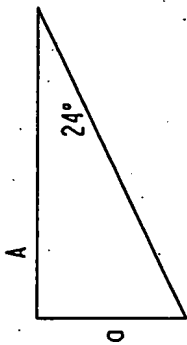
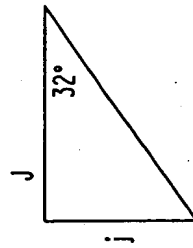
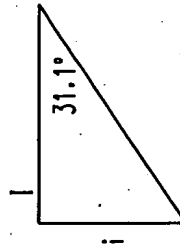
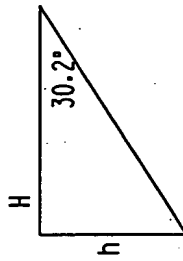
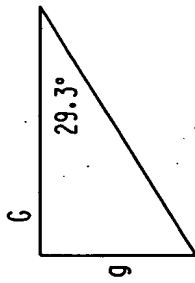
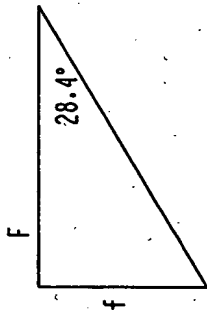
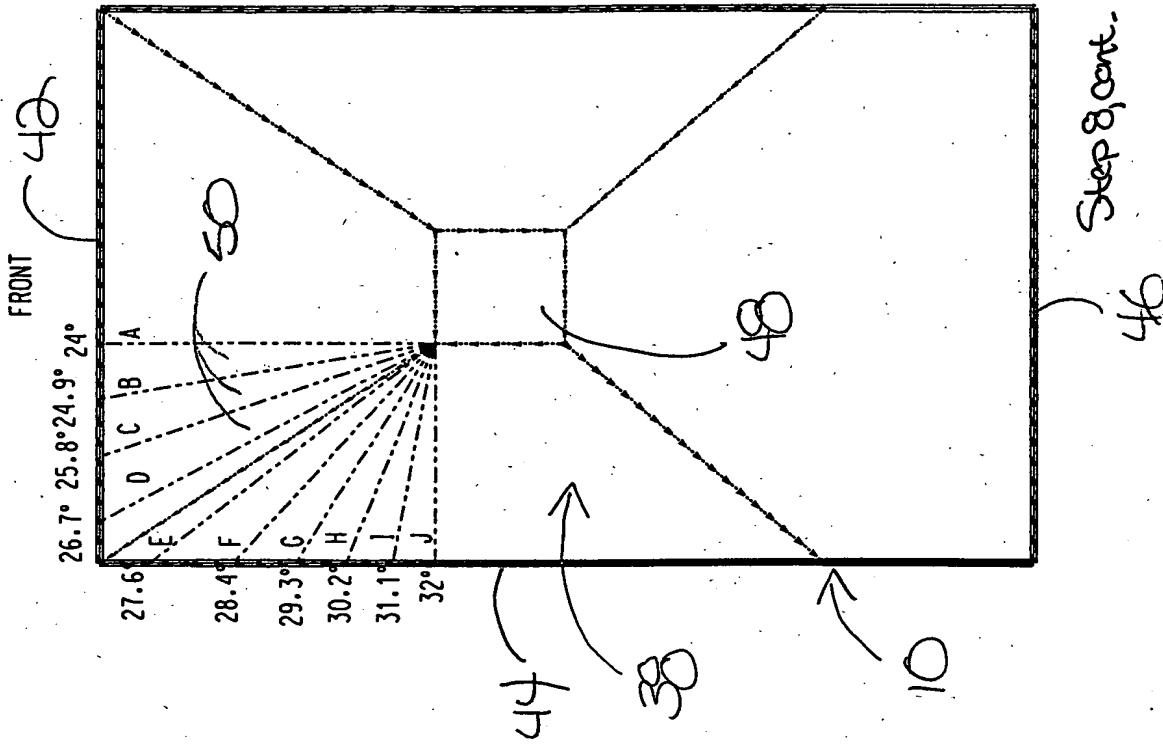
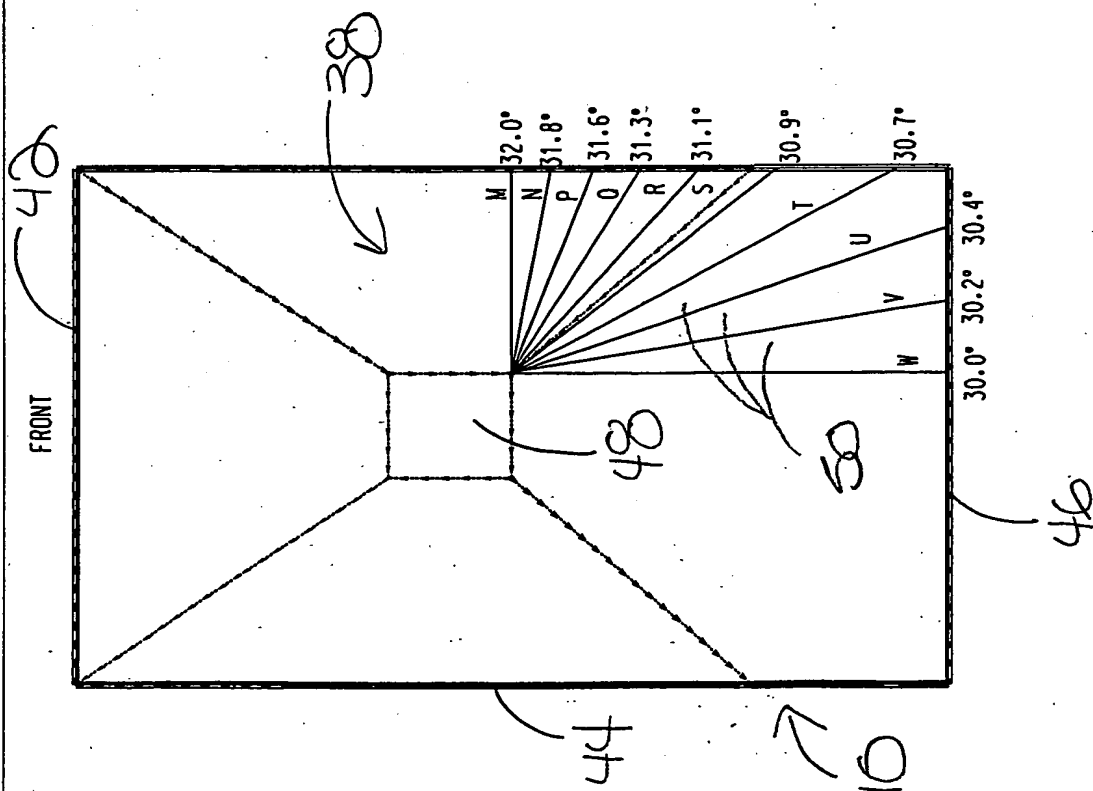


FIG. 10a



St. G. W. Co. Cont.

Fig. 10b

FIG. 10c

Step 8, cont.

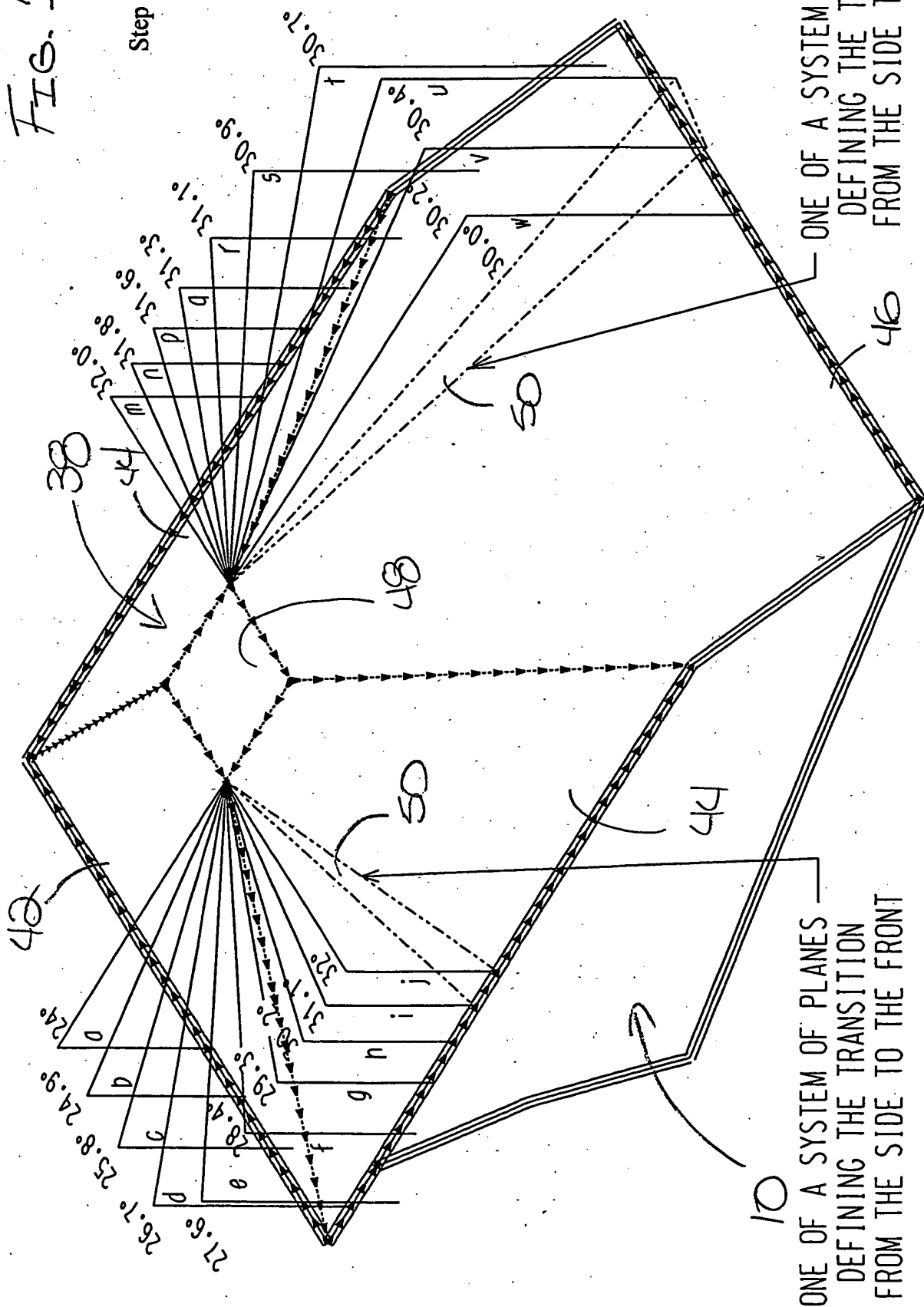
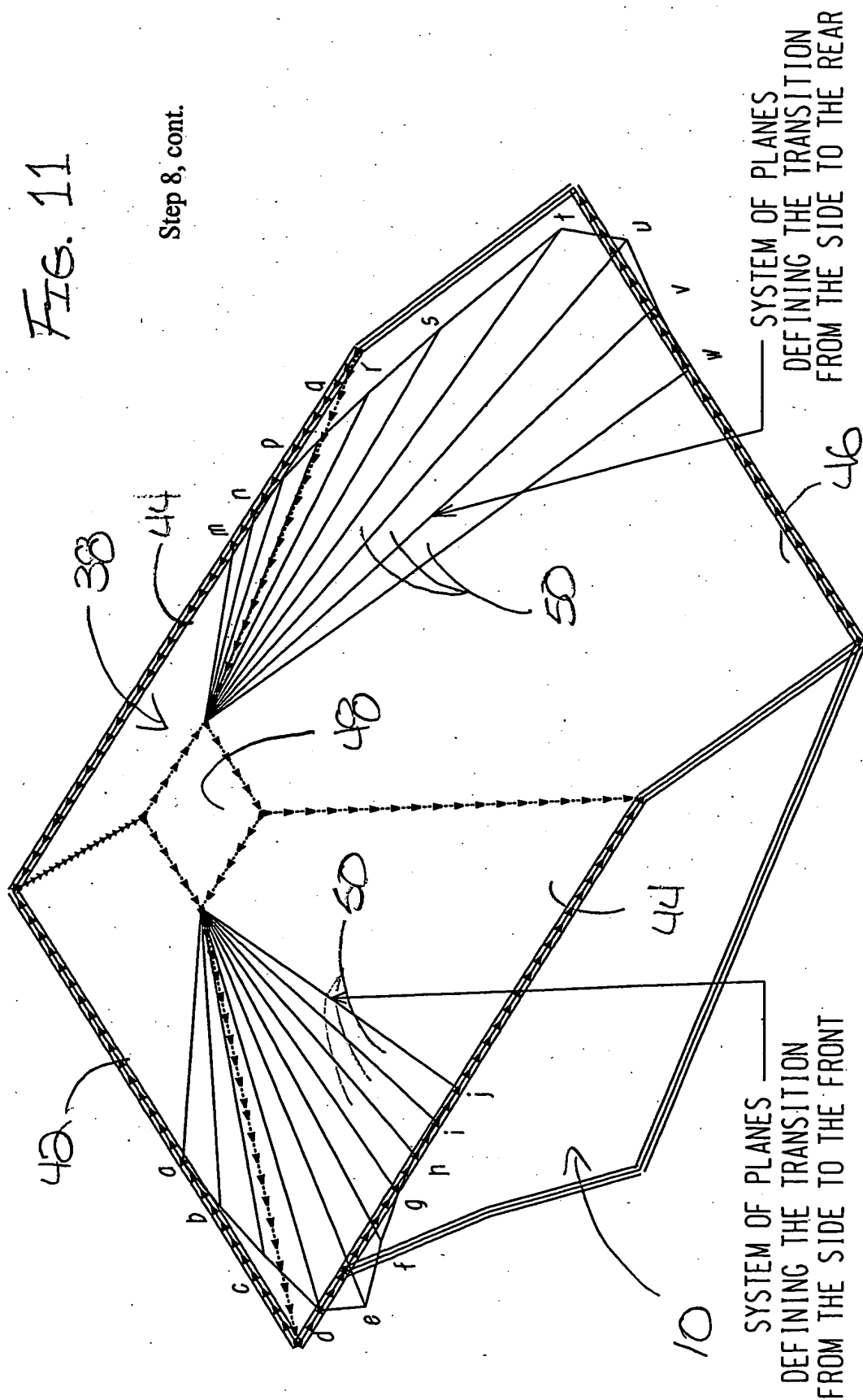


FIG. 11

Step 8, cont.



**Step 8, cont.**

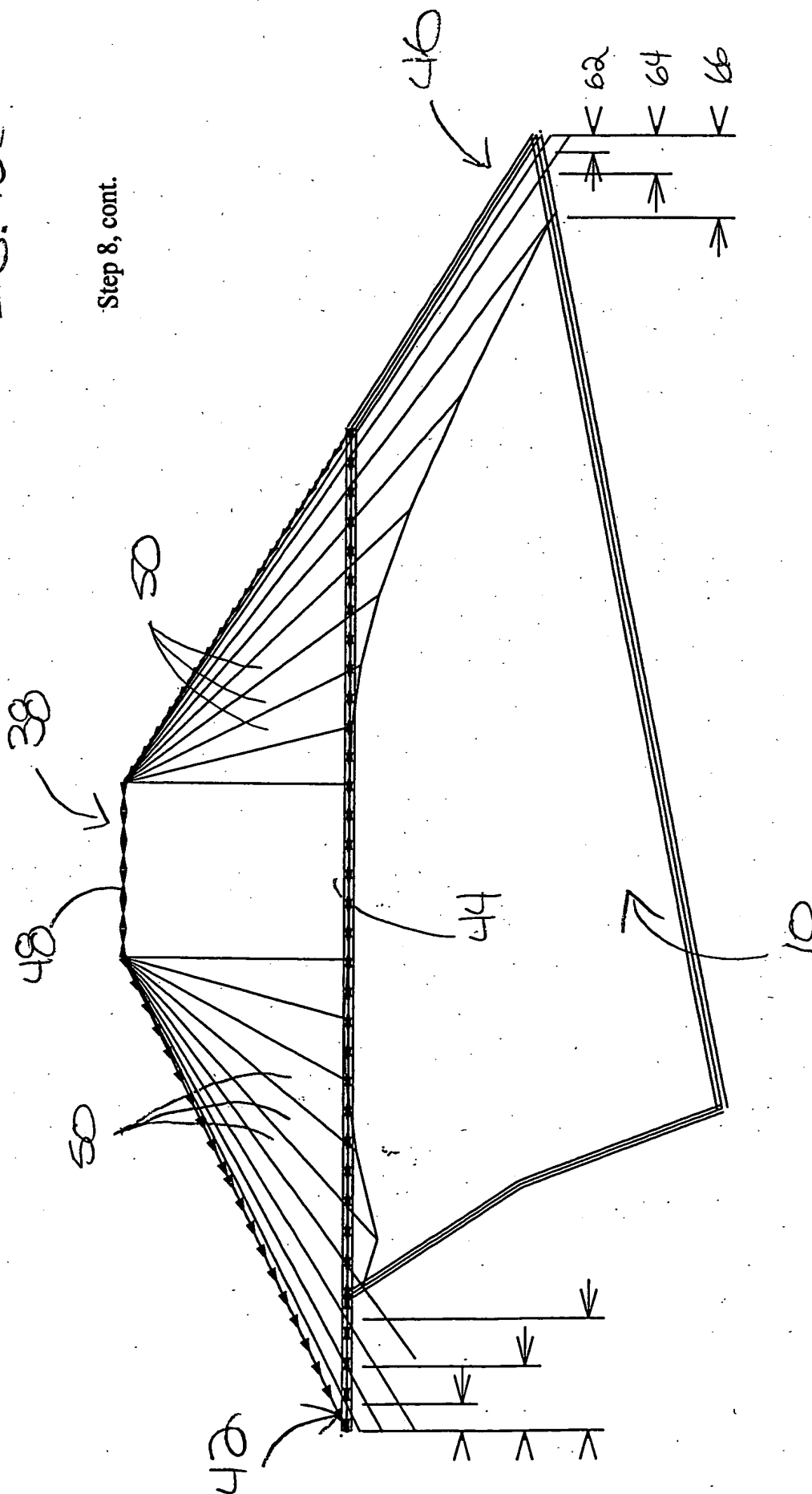


FIG. 13

Step 8, cont.

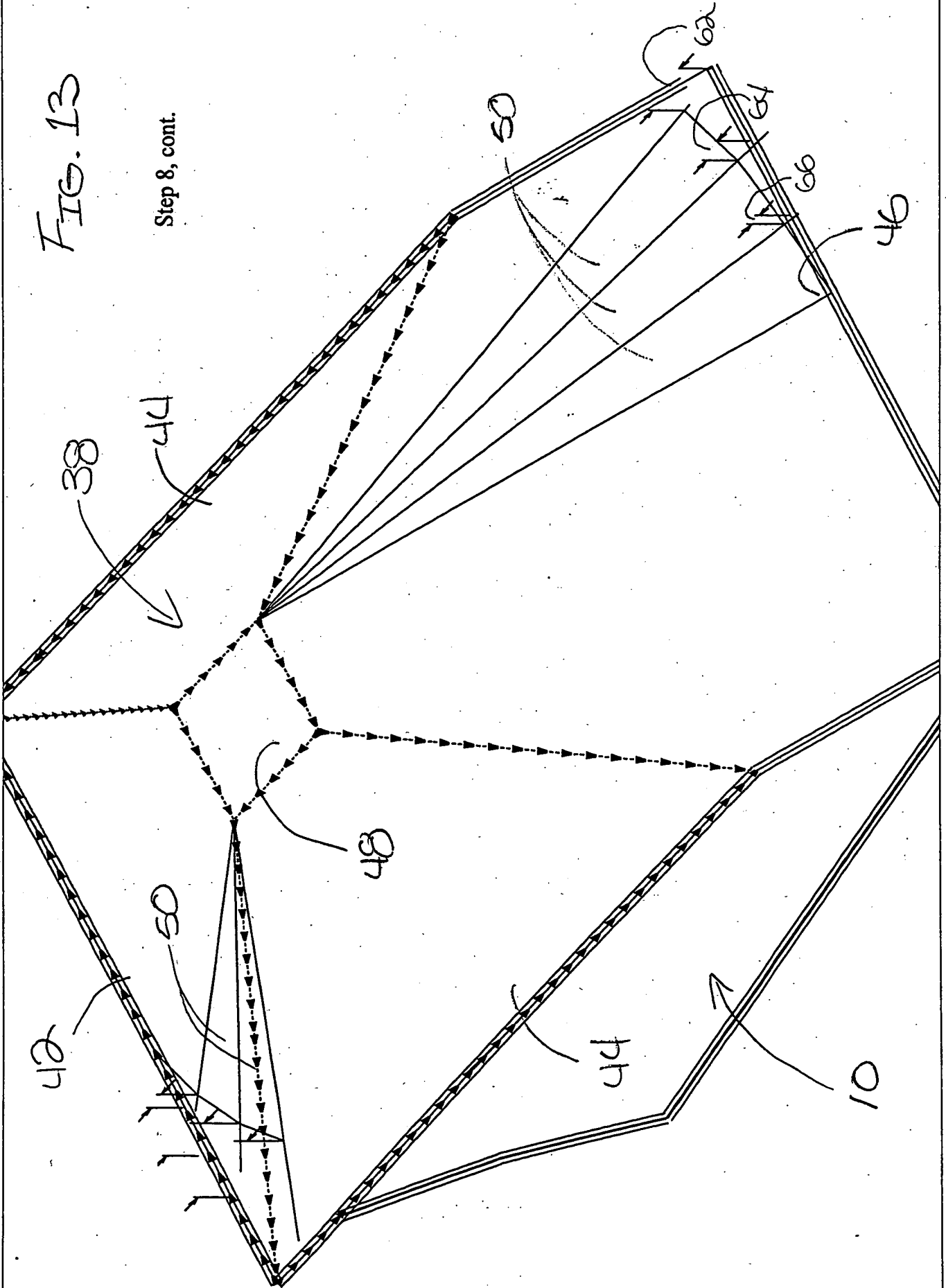


FIG. 14

Step 8, cont.

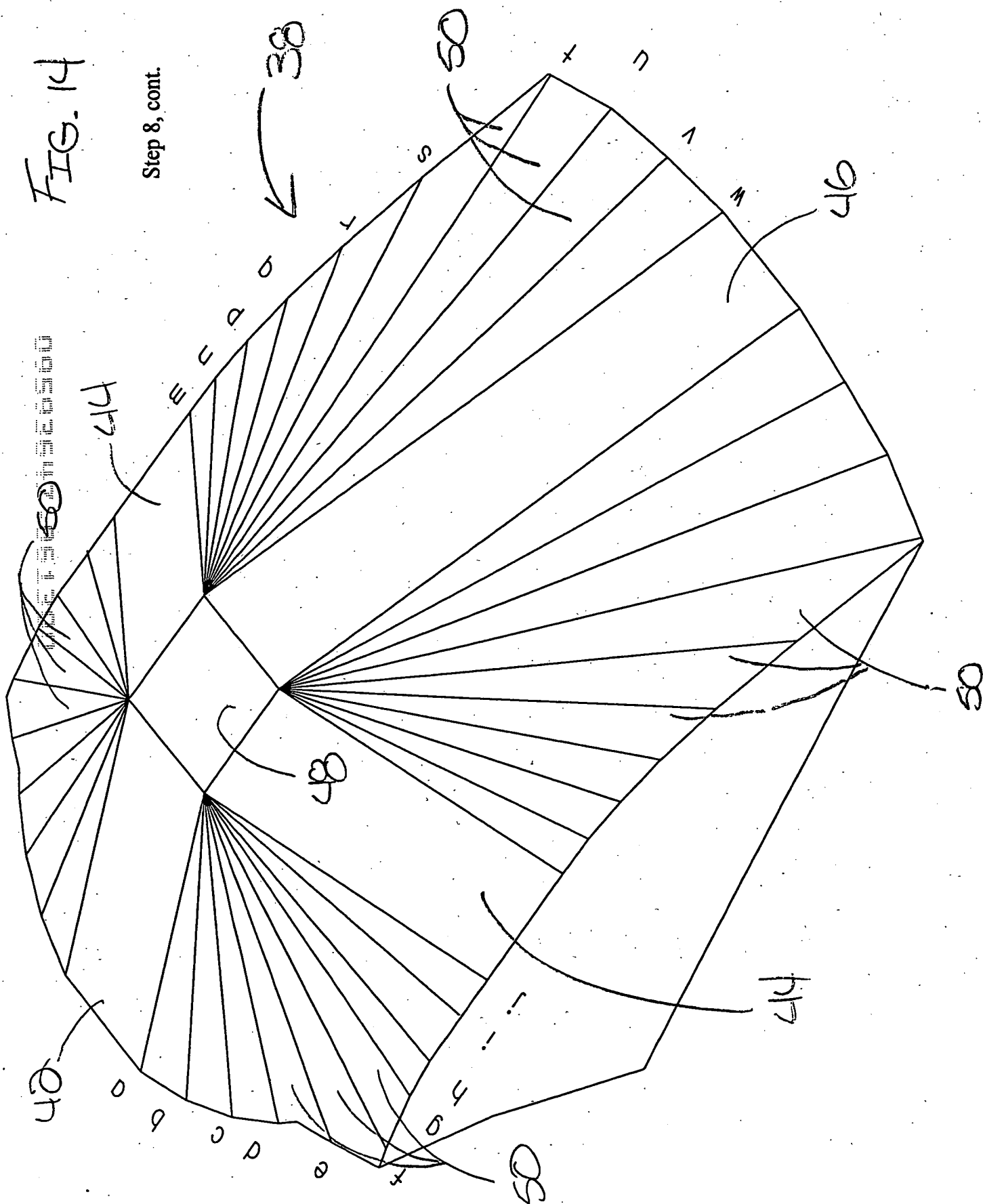
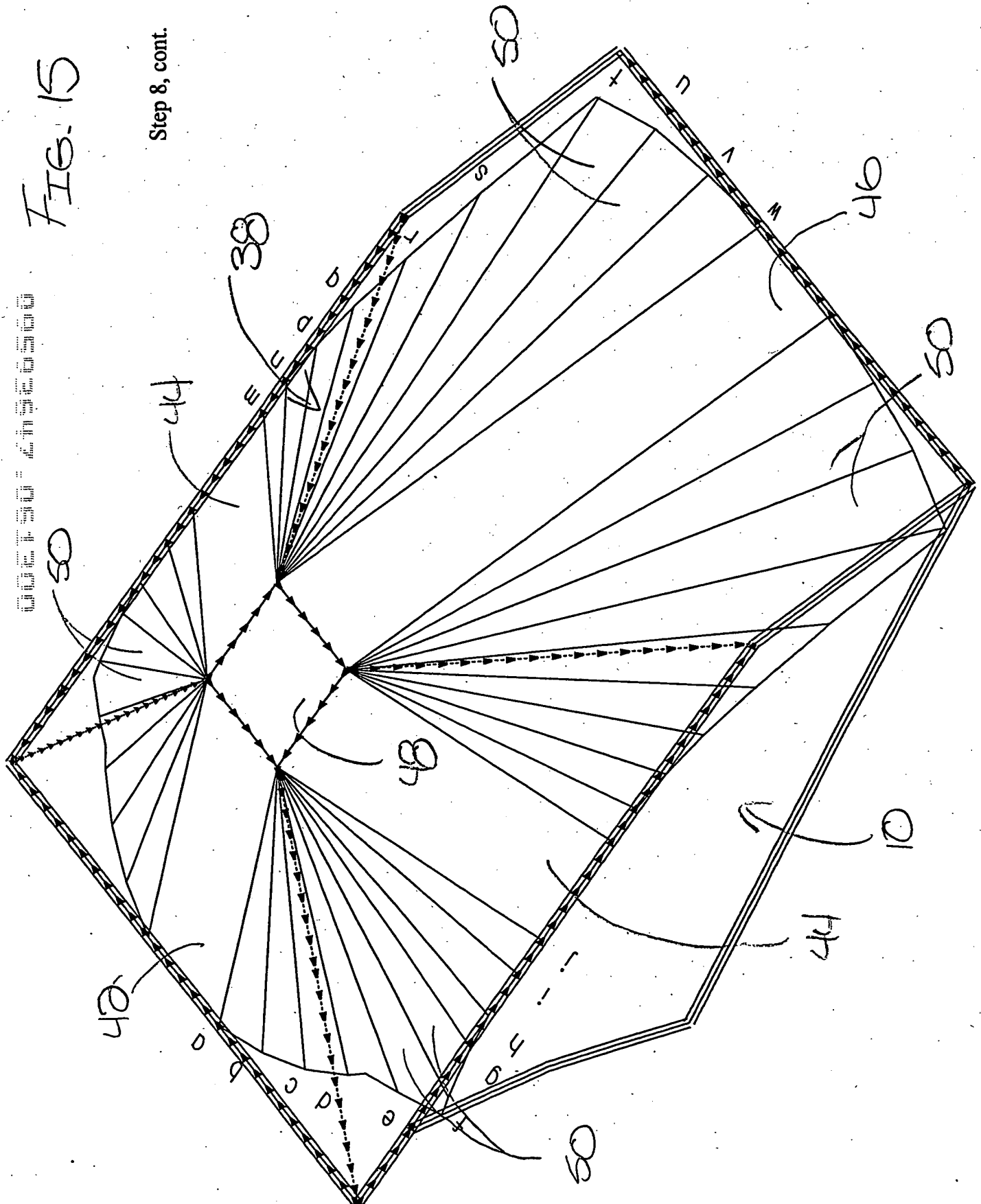


FIG. 15

Step 8, cont.







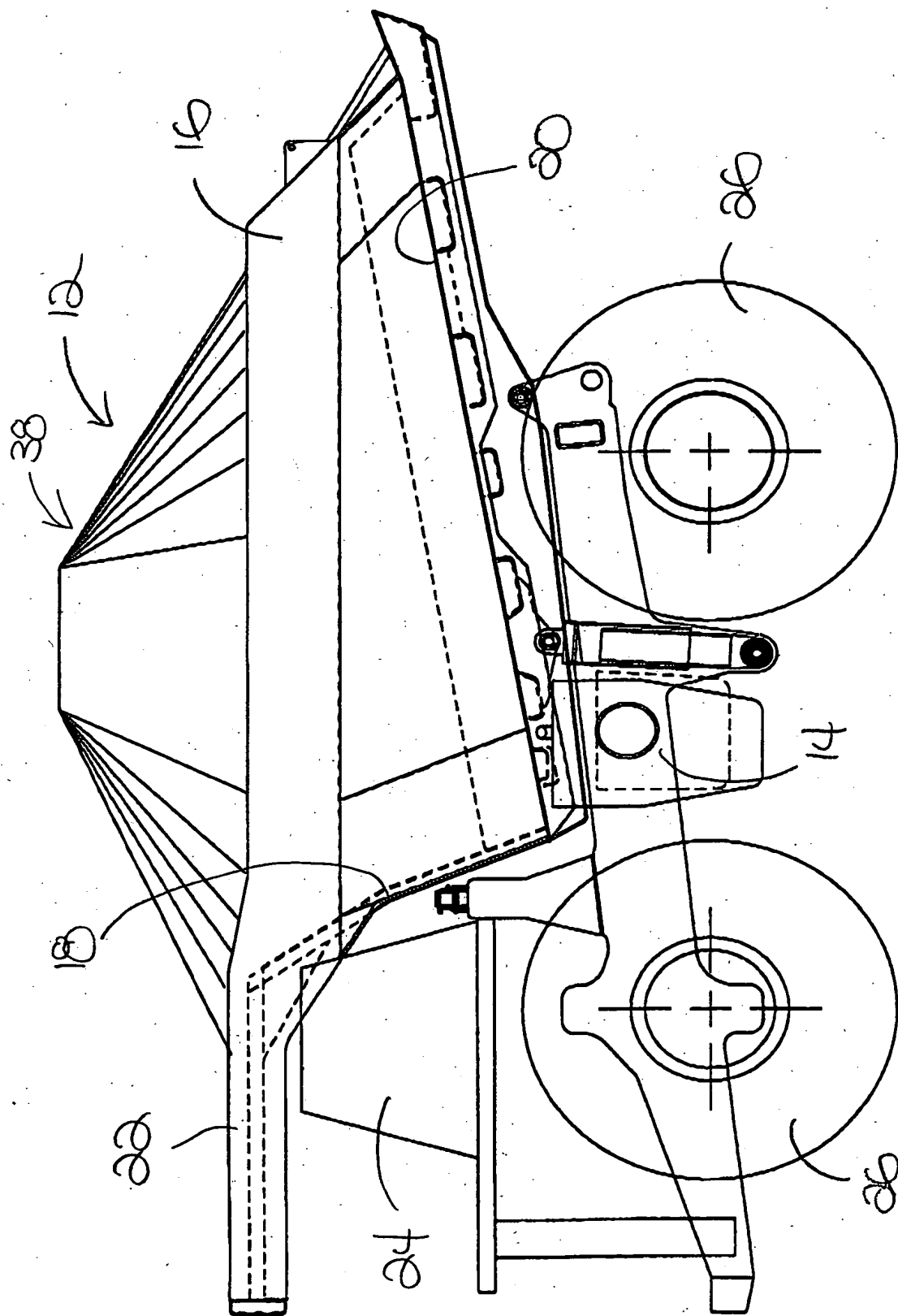
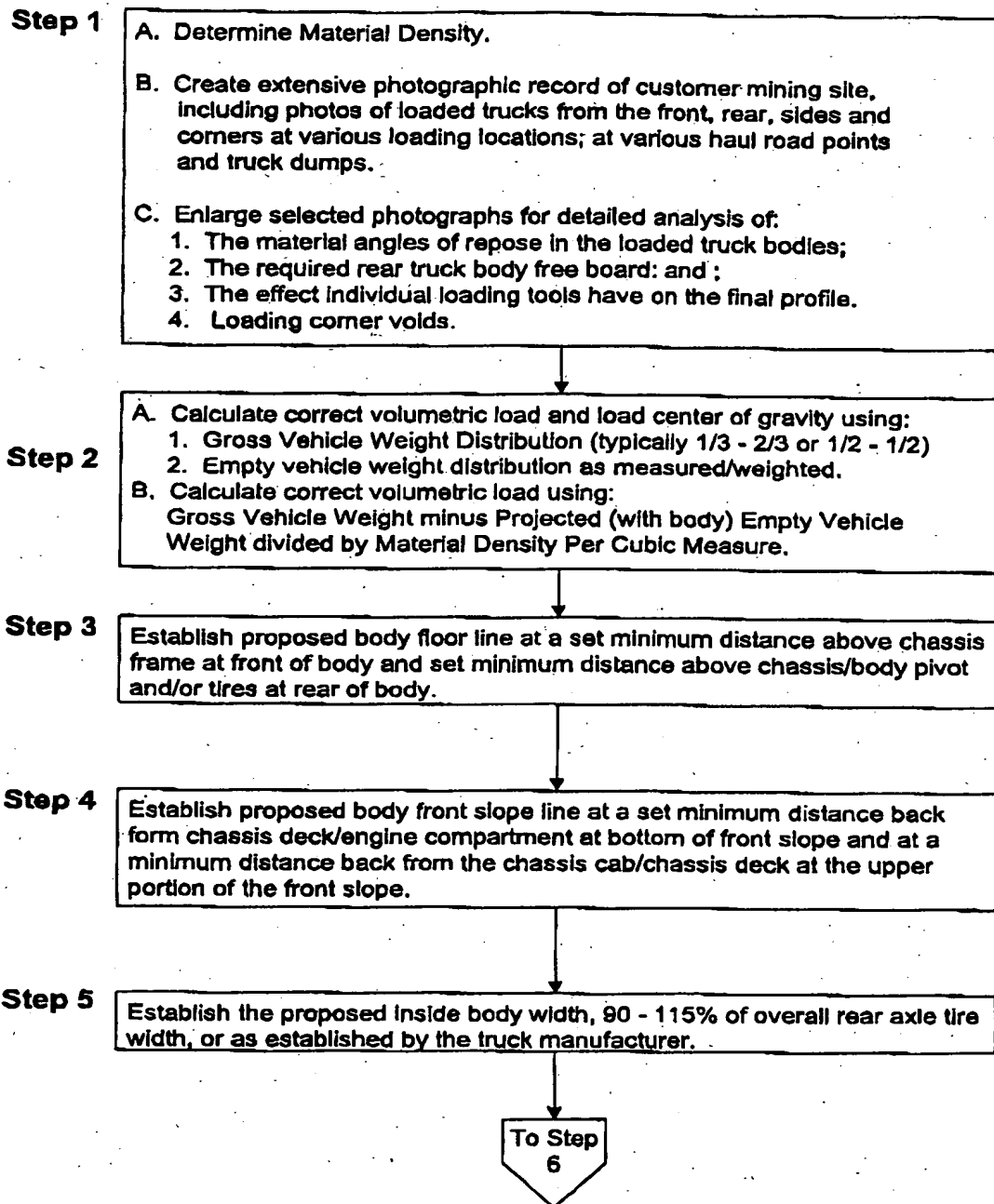
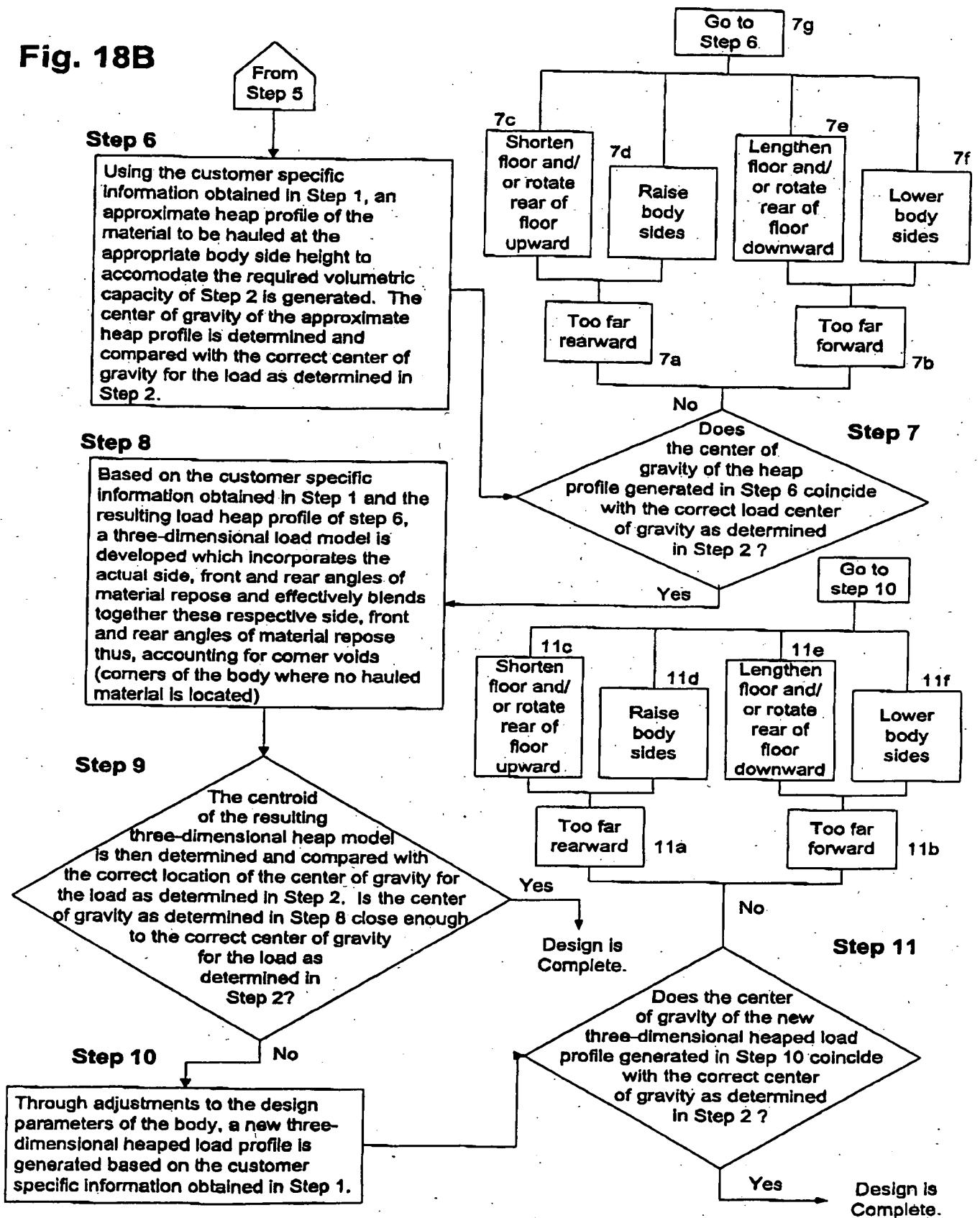


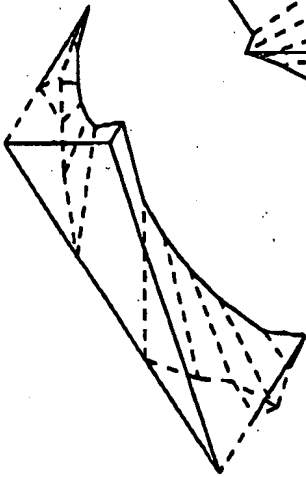
FIG. 17



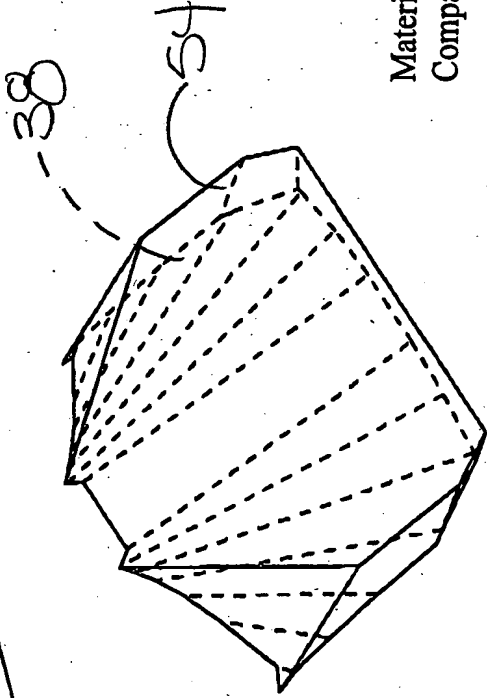
**Fig. 18A**

**Fig. 18B**

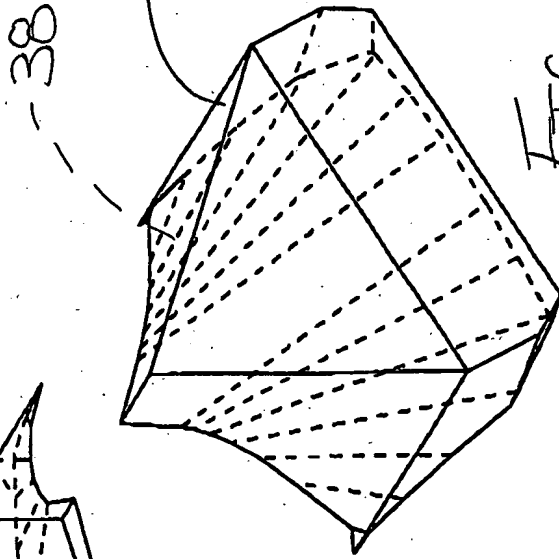
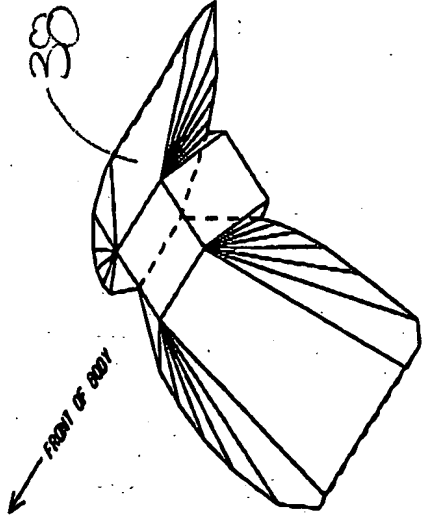




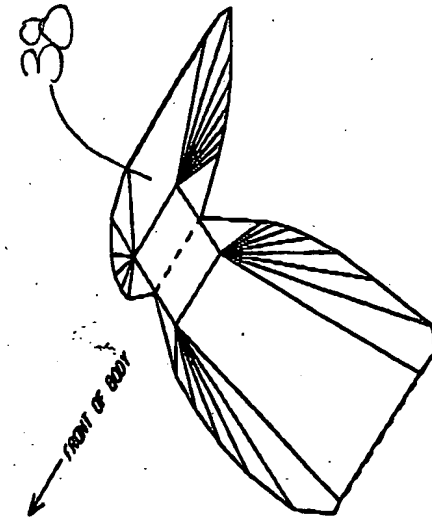
Material Removed By Profiling  
Compared to 2:1 Heap



Material Added By Profiling  
Compared to 2:1 Heap

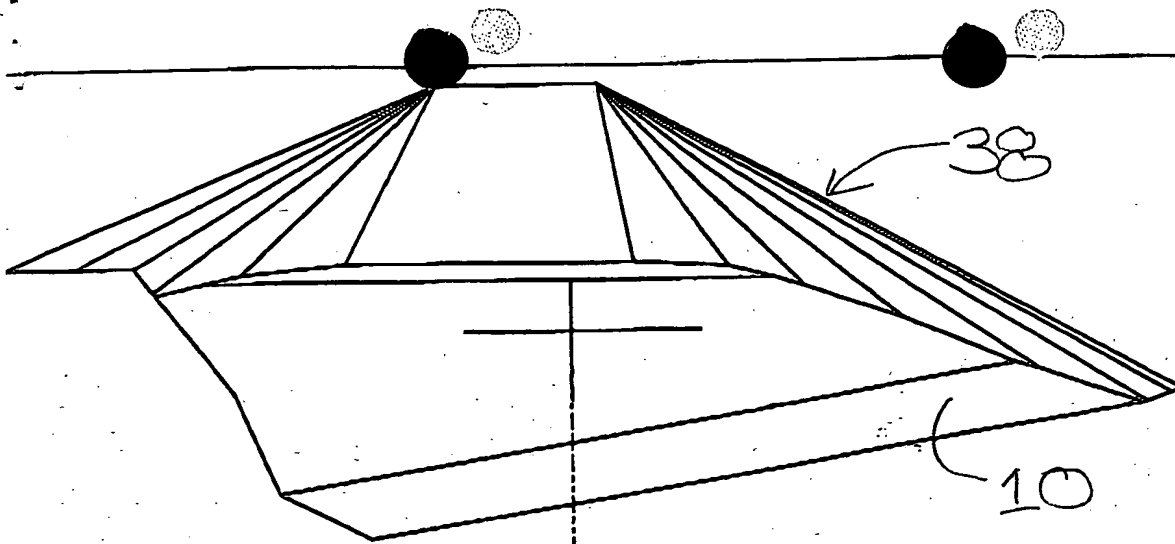


MATERIAL REMOVED BY PROFILING  
COMPARED TO S.A.E. 2:1 HEAP

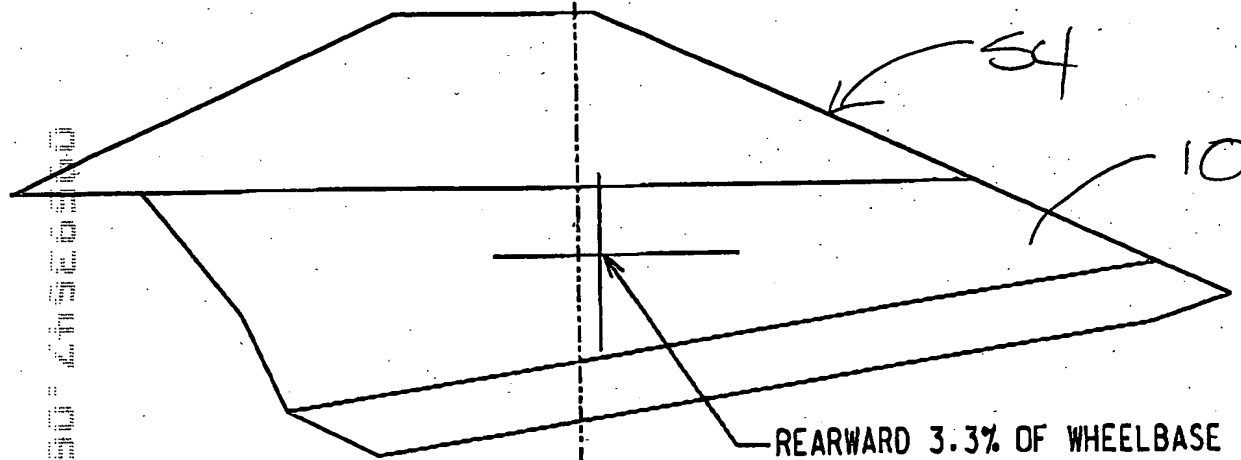


MATERIAL ADDED BY PROFILING  
COMPARED TO S.A.E. 2:1 HEAP

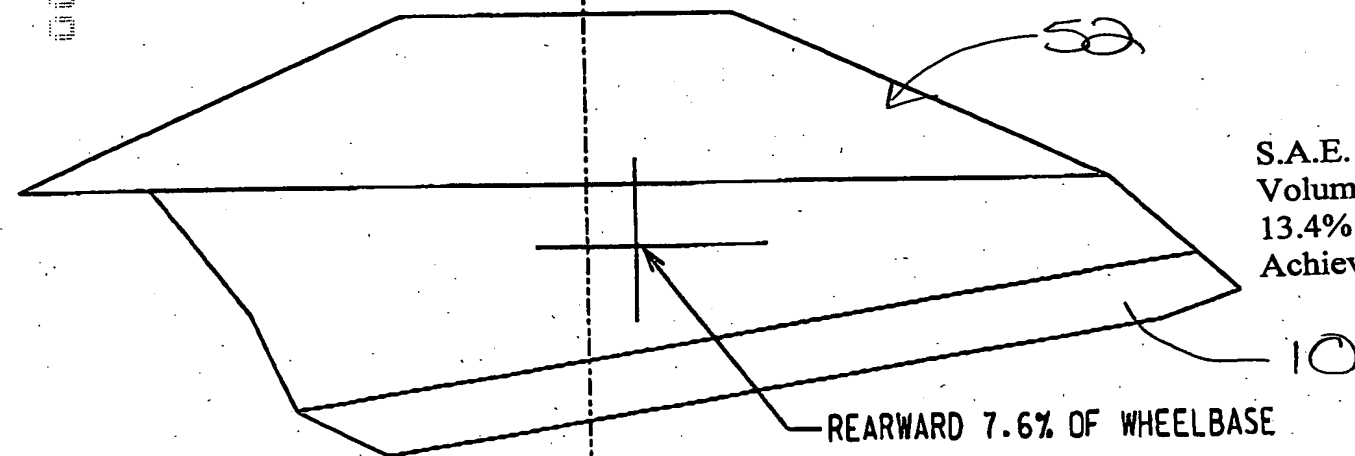
FIG. 19



Three Dimensional Load Model Of The Present Invention



2:1 Heap Volumetric Rating 5.6% Greater Than Achievable



S.A.E. 2:1 Heap Volumetric Rating 13.4% Greater Than Achievable

LOCATION OF IDEAL HORIZONTAL CENTER OF GRAVITY

FIG. 20

二



Heidi

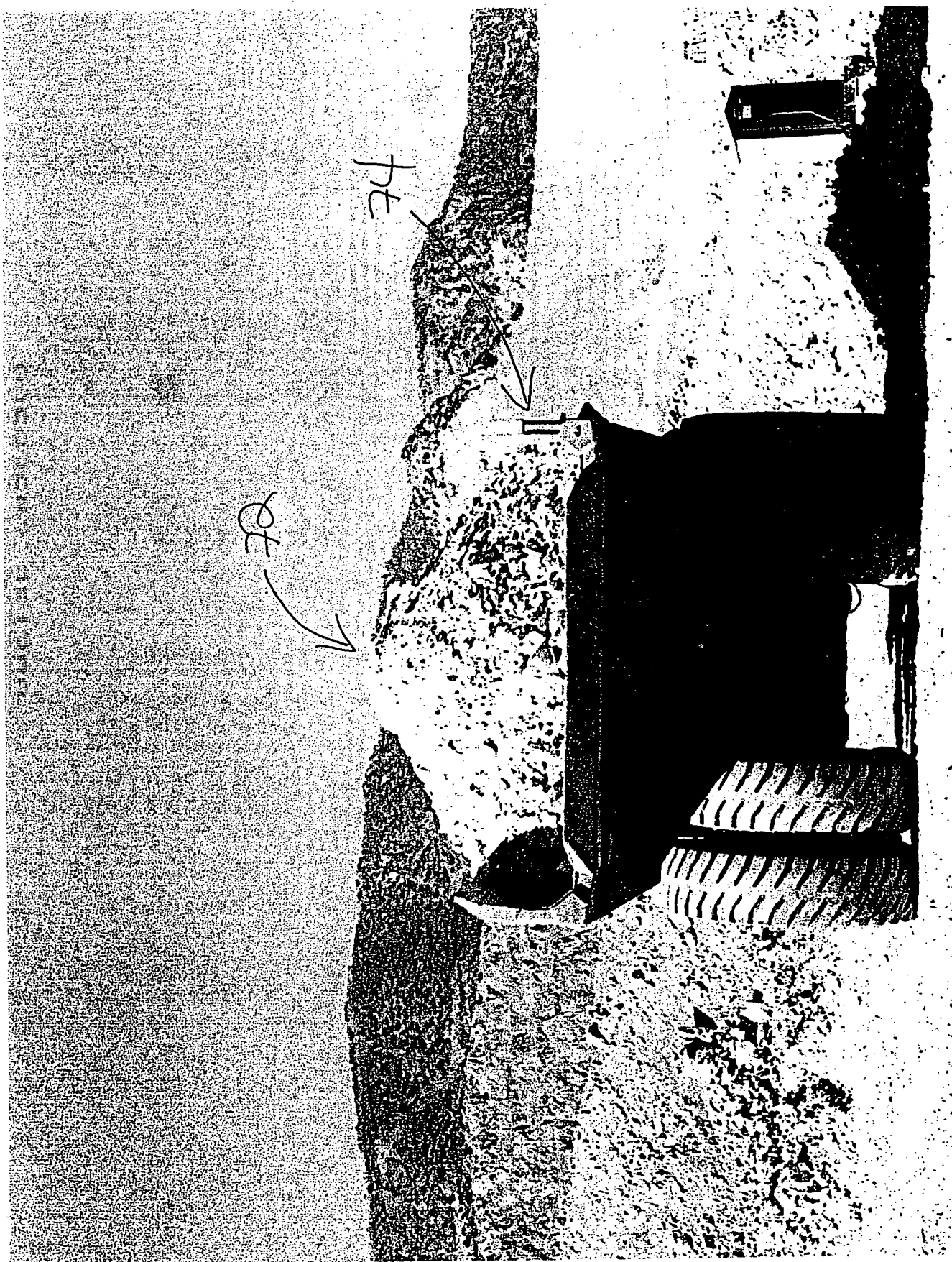


FIG. 22



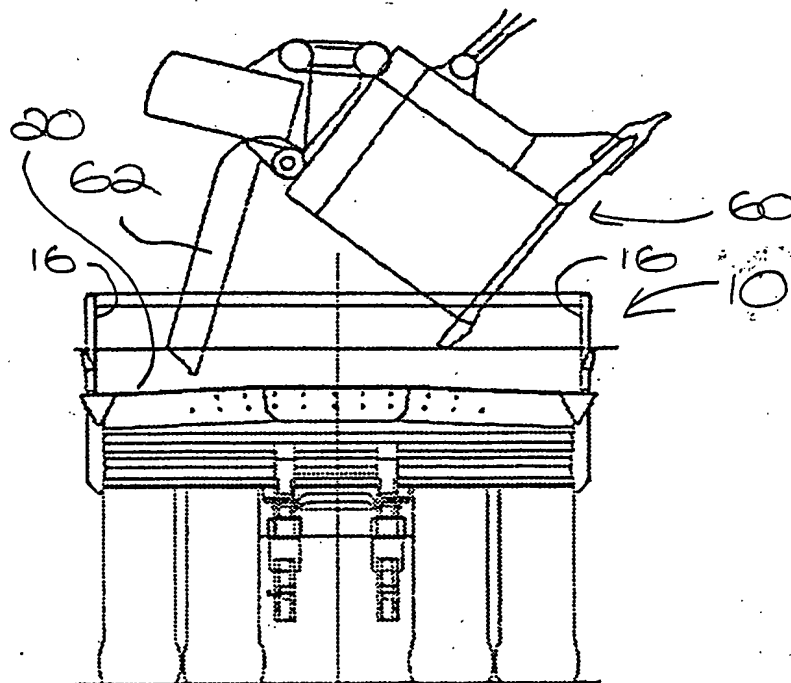
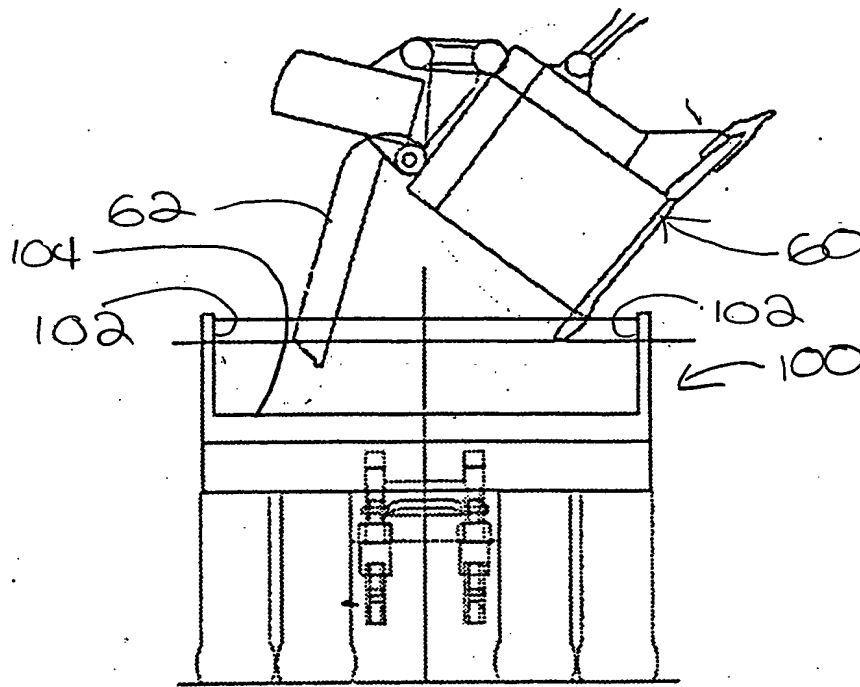
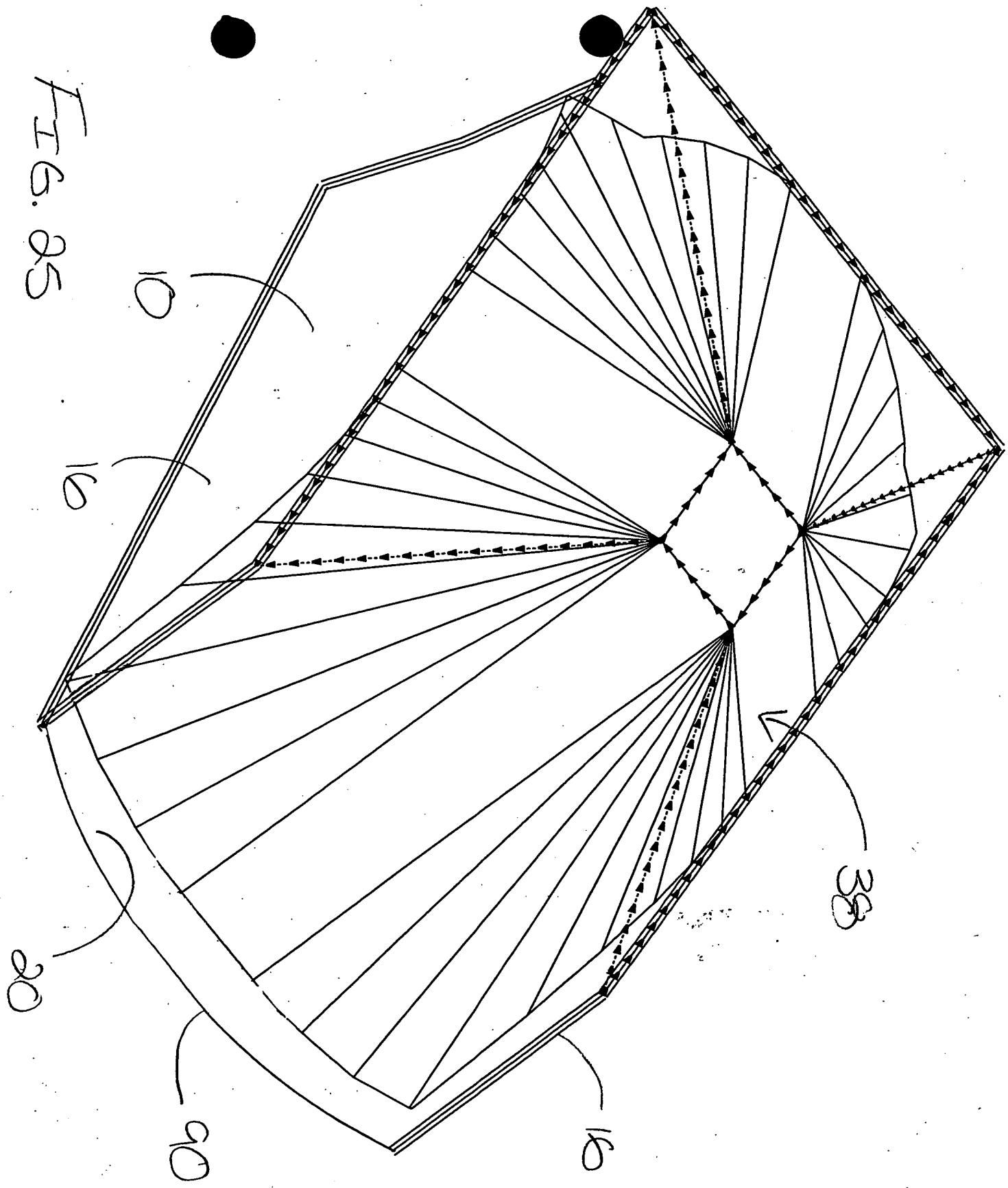


FIG. 25



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